



Benefits of the Proposed Action

The primary goals of the Proposed Action, as described in the Klamath Agreements, are centered on improving and resolving issues of low or declining fish populations, inadequate water supplies, and degraded water quality on the Klamath River, thereby benefitting the communities who rely on them, or historically relied on them, for a way of life.

Based on the evaluation of the Proposed Action (Alternative 2)—removal of four dams and implementation of connected restoration activities—the following benefits were found.

➤ Fish and Fisheries

Chinook salmon

Removal of the dams, combined with restoration of aquatic habitats, is expected to increase the annual production of adult Chinook salmon by an average of 81.4 percent. The Chinook salmon ocean commercial and sport harvests is also forecasted to increase by an average of 46.5 percent, while the tribal harvest would increase by an average of 54.8 percent and the in-river recreational fishery would increase by an average of 9 percent.

Steelhead/Redband Rainbow trout

Steelhead trout would also be able to migrate to historical habitat. Distribution of Steelhead in the watershed is expected to expand to a greater degree than that of any other anadromous salmonid species under dam removal. Access to approximately 420 miles of historical habitat is estimated to again be available for steelhead upstream of the lowest dam. Steelhead are the most prized game fish in the Klamath River; providing recreational fishing opportunities that would expand well into the Upper Basin in Oregon. Dam removal would also expand the total distribution of trophy Redband Rainbow trout in the fishery and would provide a more natural flow and temperature regime for trout and reintroduced salmon and steelhead.

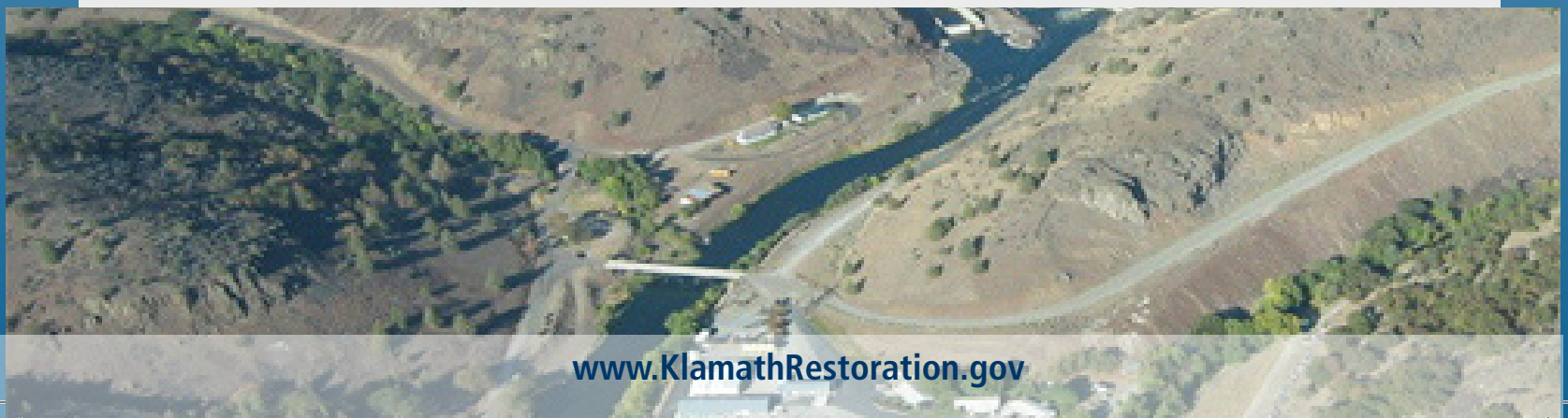


Coho salmon

Coho salmon from the Upper Klamath River population would be expected to reclaim 68 miles of habitat, including approximately 45 miles in the mainstem Klamath River and tributaries as well as an additional 23 miles of river where the reservoirs currently stand. Increased access to historical habitat, combined with the restoration activities, is expected to advance the recovery of California and federally listed coho salmon.

Salmon disease

Dam removal would likely alleviate many of the conditions conducive to disease outbreaks that currently occur downstream of Iron Gate Dam.



Water Flows



The differences in monthly average water flows between dams remaining in place and the dams being removed are relatively small; however, without the dams and with the implementation of the KBRA, pulse flows and other seasonal fluctuations would occur more often. The absolute minimum flow target under the KBRA at the location of Iron Gate Dam will be approximately 800 cubic feet per second (cfs). In most months and years, however, the flow targets will be much greater. When the flow drops below the minimum flow amount, additional water would be released from Upper Klamath Lake through Keno Reservoirs. There may be extreme drought years where the flow drops slightly below this value, but hydrologic simulations using the last 50 years of data indicate that the flow would never drop below 700 cfs at the location of Iron Gate Dam after dam removal. As a comparison, the flows in 1992, were about 400 cfs in July and August below Iron Gate Dam because there was very little water released from Upper Klamath Lake during this period. Current regulatory requirements and the KBRA will ensure the flow will be higher than this in the future because these regulations and agreements ensure that adequate water will be released from Upper Klamath Lake to the Klamath River.

Water Quality

With dam removal, important Klamath River water-quality goals, such as elimination of the reservoir's toxic algal blooms and lowering fall water temperatures and improving dissolved oxygen concentrations, would be achieved immediately. Other water quality improvement goals, such as nutrient reductions, would be accelerated by KBRA actions but could still require decades to achieve. Without dam removal or restoration activities, continued progress will be made towards meeting these water quality goals under the Clean Water Act, but they are less likely to be met during the 50-year period of analysis for the environmental review.

Regional Economics and Jobs

Dam removal and ecosystem restoration would create a number of full time, part time, and temporary employment.

- The one-year dam removal project is estimated to result in 1,400 jobs during the year of construction.
- Implementation of restoration programs of the KBRA is estimated to result in 4,600 jobs over its 15 years of implementation.
- Commercial fishing jobs were estimated in five Management Zones.
 - 136 average annual jobs in the Central Oregon Management Area
 - 11 average annual jobs in the KMZ-OR Management Area (Curry County)
 - 19 average annual jobs in the KMZ-CA Management Area (Humboldt and Del Norte Counties)
 - 69 average annual jobs in the Fort Bragg Management Area
 - 218 average annual jobs in the San Francisco Management Area
- Employment stemming from increased gross farm income during the modeled drought years is estimated to range from 70 to 695 average annual jobs.

Cultural Resources

All of the native people residing in the Klamath River environment have spiritual beliefs and traditional practices that are inseparable from the River and surrounding homeland environments.

Dam removal and implementation of the KBRA would help address tribal trust and social issues identified by the Klamath River Basin Tribes as detrimental to their traditional way of life. Dam removal would have beneficial effects on water quality, fisheries, terrestrial resources, and traditional cultural practices. Dam removal would enhance the ability of Tribes in the Klamath River Basin to conduct traditional ceremonies and other traditional practices.